

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2005/000312

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☐ Claim Nos. :
because they relate to subject matter not required to be searched by this Authority, namely :
2. ☐ Claim Nos. :
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :
3. ☐ Claim Nos. :
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. Claims 1-7
A method for determining the susceptibility of a biofilm to an antimicrobial agent using a metabolic substrate.
2. Claims 8-12
An assay device comprising a plurality of wells and supports, each support comprising a disc.
3. Claims 13-27
An assay system comprising: I) a device with a plurality of wells and supports, wherein the supports need not to comprise discs, and II) a method of culturing a biofilm using a fluorogenic or chromogenic moiety that is not necessarily a metabolic substrate.

CONTINUED ON EXTRA SHEET

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

- Remark on Protest** ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(7): C12Q 1/18, G01N 21/64, C12Q 1/04, C12M 1/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(7): C12Q 1/18, G01N 21/64, C12Q 1/04, C12M 1/34

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
Canadian Patent Database; Delphion; PubMed; BIOSIS. keywords: biofilm, sessile, bacteria, yeast, antibiotic, antimicrobial, biocide, XTT, metabolic substrate or dye, disc, acetate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KUHN, D.M. ET AL. Comparison of biofilms formed by <i>Candida albicans</i> and <i>Candida parapsilosis</i> on bioprosthetic surfaces Infection and Immunity, February 2002, Vol.70, No.2, pages 878-888. see whole document	1-3, 5-7
Y		4, 19, 20, 22, 25
X	RAMAGE, G. ET AL. Characteristics of biofilm formation by <i>Candida albicans</i> Revista Iberoamericana de Micología, December 2001, Vol.18, No.4, pages 163-170. see whole document	1-3
Y		4, 19, 22, 25

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 May 2005 (12-05-2005)

Date of mailing of the international search report

15 June 2005 (15-06-2005)

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International application No.
PCT/CA2005/000312

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CA 2,248,808 A (UNIVERSITY TECHNOLOGIES INTERNATIONAL INC.) 18 September 1997. see whole document and especially Fig. 3	8-18, 21, 26, 27
Y		19, 20, 22-25
X	CERI, H. ET AL. The MBEC assay system: multiple equivalent biofilms for antibiotic and biocide susceptibility testing Methods in Enzymology, 2001, Vol.337, pages 377-385. see whole document	8-12
Y		4, 19, 20, 22-25
X	TOMLIN, K.L. ET AL. Interspecies biofilms of <i>Pseudomonas aeruginosa</i> and <i>Burkholderia cepacia</i> Canadian Journal of Microbiology, October 2001, Vol.47, No.10, pages 949-954. see whole document	8-12
Y		19, 20, 22-25
Y	JIN, Y. ET AL. Biofilm-forming ability of <i>Candida albicans</i> is unlikely to contribute to high levels of oral yeast carriage in cases of human immunodeficiency virus infection Journal of Clinical Microbiology, July 2003, Vol.41, No.7, pages 2961-2967. see pages 2961-2962	19, 20, 22, 25

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2005/000312

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA2248808	18-09-1997	AU724282 B2	14-09-2000
		AU2088797 A	01-10-1997
		CA2248808 A1	18-09-1997
		DE29723730U U1	04-03-1999
		EP0904347 A1	31-03-1999
		JP2000506021T T	23-05-2000
		US6051423 A	18-04-2000
		US6326190 B1	04-12-2001
		US6410256 B1	25-06-2002
		US6599714 B1	29-07-2003
		WO9733972 A1	18-09-1997

FURTHER INFORMATION CONTINUED FROM PCT/ISA/210

Continuation of Box No. III:

The method of claims 1-7 and the device of claims 8-12 are not so linked as to form a single general inventive concept (Rule 13.1). The device is not specifically designed for carrying out the claimed method because its alleged contribution over the prior art (which appears to be the use of supports comprising discs) does not correspond to the alleged contribution of the method (which appears to be the use of a metabolic substrate). As for the assay system of claims 13-27, it does not require the use of neither the supports comprising discs, nor the metabolic substrate. Therefore, claims 13-27, as drafted, do not form a single general inventive concept with claims 1-7 or 8-12.